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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,015	03/25/2002	Hideki Fujiwara	F-7369	9145

28107 7590 02/08/2005  
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EXAMINER

CHARLES, MARCUS

ART UNIT	PAPER NUMBER
3682	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/089,015

Applicant(s)

FUJIWARA ET AL.

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 9/20/04 & 11/18/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This action is responsive to the Amendment/RCE filed 9/20/04 & 11/18/05 respectively. Claims 1-21 are currently pending.

#### ***Specification***

1. The disclosure is objected to because of the following informalities: in page 9, the reference numeral "34a" is used to depict "inward ring-like projections" and in page 12, it is being used to depict "an outer diameter side". Therefore, it is not clear as to what is numeral "34a". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 1, 7, 8, 10, 11, 16, 17 and 19, it is not clear as the difference between "the inner diameter side of the pulley" and "the inner diameter surface of the pulley". According to the claim language, it appears that the inner diameter side and the inner diameter surface of the pulley are two different and distinct limitations. However, according to the disclosure, it appears that the inner diametrical surface is a section of the inner diameter side of the pulley.

In claims 1, lines 5-6, the claims refers to "an inner diametrical surface of the pulley" and in claim 3, the claim refers to an inner diametrical surface of the pulley".

Therefore, it is unclear as to whether they are the same. If they are the same then there exist a double inclusion.

In claim 7, lines 5-6, and line 26, there exist a double inclusion between the phrase "an inner diametrical surface of the pulley". See rejection to claims 1 and 3 above.

In claim 10, lines 5-6 and line 21, there exist a double inclusion between the phrase "an inner diametrical surface of the pulley". See rejection to claims 1 and 3 above.

In claim 11, lines 5-6 and claim 13, lines 1-2, there exist a double inclusion between the phrase "an inner diametrical surface of the pulley". See rejection to claims 1 and 3 above.

In claim 16, lines 5-6 and line 24, there exist a double inclusion between the phrases "an inner diametrical surface of the pulley". See rejection to claims 1 and 3 above.

In claim 17, lines 5-6, line 12 and claim 18, lines 1-2, there exist a double inclusion between the phrases "an inner diametrical surface of the pulley". See rejection to claims 1 and 3 above.

In claim 19, lines 5-6, line 14 and line 26, there exist a double inclusion between the phrases "an inner diametrical surface of the pulley". See rejection to claims 1 and 3 above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4-5, 11-12 14-15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al.(5, 517,957) in view of Kajihara et al. (5,607,240). Wagner et al. discloses a pulley unit (fig. 4) comprising a pulley body (42), a shaft body (50) concentrically disposed in the inner diameter side of the pulley, a one way clutch (48), interposed in the annular space between the hollow shaft body and the pulley body, a roller bearing (45) disposed in the annular spaced between the pulley body and the hollow shaft body such that the inner surface (44, 46) of the pulley body in the annular space and the outer surface of the shaft body in the annular groove forms the inner and outer raceway of the clutch and roller bearing, a seal ring (54, 55) disposed on each axial end of the annular space, a retainer (not labeled) for accommodating each roller elements of the rolling bearing and the clutch. Wagner et al. do not disclose the retainer of the annular portion facing the side of the seal ring and the annular portion having an outer diameter side, which is reduced in diameter and defining a step between the outer diameter and a seal so as to increase the storage volume for lubricating oil. Kajihara et al. disclose a bearing unit comprising a bearing retainer (5) having a reduced outer diameter section (5w-a) defining a step between the outer diameter and the seal in order to allow air to escape while allowing the axial

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movement of grease to the rollers more easily and freely. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the retainer of Wagner et al. so that the retainer has a reduced diameter in view of Kajihara et al. in order to allow air to escape while allowing the axial movement of grease to the rollers more easily and freely.

In claims 4-5, note the retainer (5) of Kajihara et al. is tapered.

In claim 17, note the roller bearing (49) and the ball bearing (46).

In claim 21, it is apparent that the outer diameter of the ball bearing (45) is set larger than that of the roller bearing (49).

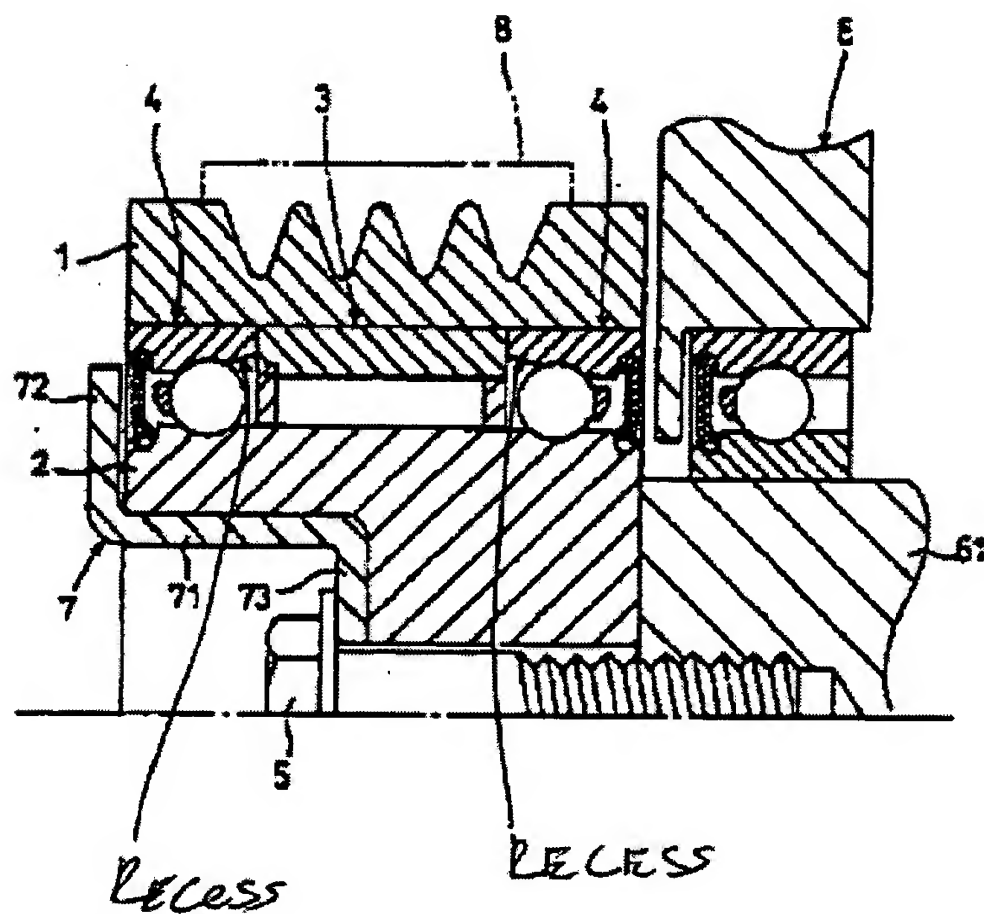
6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al. in view of Kajihara et al. as applied to claim 1 above, and further in view of Doi et al.(6,367,982). Wagner et al. and Kajihara et al. do not disclose that the roller is made from resin and includes oil. Doi et al. discloses a bearing comprising rollers (5) made from resin and that it is well known for such roller to include lubricating oil in order to reduce maintenance, reduce friction and improve the life span of the system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the rollers of Wagner et al. to include rollers made from resin and including lubricating oil in view of Doi et al. in order to reduce maintenance, reduce friction and improve the life span of the system.

***Allowable Subject Matter***

Claims 3, 7-8, 10 and 16-19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.


**FIG. 7**



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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (703) 305-6877. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

  
Marcus Charles  
Primary Examiner  
Art Unit 3682  
February 02, 2005